AMENDMENT TO THE CLAIMS

1. (Original) A light-emitting semiconductor device which is formed by laminating plural layers of group III nitride compound semiconductor, comprising:

an active layer having single layer structure of a semiconductor layer at least including indium (In),

wherein composition ratio a of indium (In) is in a range of 0.0001 to 0.05, said composition ratio a is varied at a constant period L in waveform in a direction of the z axis which is parallel to the growth axis of said active layer, and said period L is arranged to be an approximately constant value selected from a range of 1nm to 10nm.

2. (Original) A light-emitting semiconductor device which is formed by depositing plural layers of group III nitride compound semiconductor, comprising:

an active layer having single layer structure of a semiconductor layer at least including indium (In),

wherein composition ratio a of indium (In) is in a range of 0.0001 to 0.05, said composition ratio a is varied at a constant period L in waveform in a direction of the z axis which is parallel to the growth axis of the active layer, and said period L is arranged to be an approximately constant value selected from a range of one to six times of Bohr radius R.

3. (Previously Presented) A light-emitting semiconductor device according to claim 1, wherein said period L is in an approximately constant value selected from a range of 2.4nm to 6.8nm.

4. (Previously Presented) A light-emitting semiconductor device according to claim 1, wherein said composition ratio a is in a range from 0.010 to 0.040.

5. (Previously Presented) A light-emitting semiconductor device according to claim 1, wherein gradient $\delta a/\delta z$ is arranged to be $0.01nm^{-1}$ or less at each place.

6. (Currently Amended) A light-emitting semiconductor device ~~which is a surface emitting type of semiconductor laser which is manufactured~~ according to ~~a method in~~ claim 1, comprising:

a pair of reflection planes vertical to the z axis, each of which is formed on or above, and on ~~and~~or below said active layer, respectively,

wherein said light-emitting semiconductor device comprises a surface emitting type of semiconductor laser and optical distance ΔZ between said two reflection planes are arranged to an integral multiple of half an oscillation wavelength λ ($\lambda/2$) of laser emitted from said active layer.

7. (Currently Amended) A light-emitting semiconductor device according to claim 6, wherein said ~~integer number~~integral multiple is in a range of from 1 to 10.

8. (Previously Presented) A method for manufacturing a light-emitting semiconductor device of claim 1, wherein supply amount of indium (In) material gas per unit time to the crystal growth surface on which said active layer grows is varied at a constant period selected from a range of 10 sec. to 6 min.

9. (Previously Presented) A method for manufacturing a light-emitting semiconductor device of claim 1, wherein said period is in an approximately constant selected from a range of 30 sec. to 2 min.

10. (Previously Presented) A light-emitting semiconductor device according to claim 1, wherein said active layer is doped with donor impurity so that electric concentration may be in a range of 1 x $10^{16}/cm^3$ to 1 x $10^{18}/cm^3$ at a room temperature.

11. (Previously Presented) A light-emitting semiconductor device according to claim 2, wherein said period L is in an approximately constant value selected from a range from 2.4nm to 6.8nm.

12. (Previously Presented) A light-emitting semiconductor device according to claim 2, wherein said composition ratio a is in a range from 0.010 to 0.040.

13. (Previously Presented) A light-emitting semiconductor device according to claim 3, wherein said composition ratio a is in a range from 0.010 to 0.040.

14. (Previously Presented) A light-emitting semiconductor device according to claim 2, wherein gradient $\delta a/\delta z$ is arranged to be $0.01nm^{-1}$ or less at each place.

15. (Currently Amended) A light-emitting semiconductor device ~~which is a surface emitting type of semiconductor laser which is manufactured~~ according to ~~a method in~~ claim 2, comprising:

a pair of reflection planes vertical to the z axis, each of which is formed on or above and on ~~and~~or below said active layer, respectively,

wherein said light-emitting semiconductor device comprises a surface emitting type of semiconductor laser and optical distance ΔZ between said two reflection planes are arranged to an integral multiple of half an oscillation wavelength λ ($\lambda/2$) of laser emitted from said active layer.

16. (Previously Presented) A method for manufacturing a light-emitting semiconductor device of claim 2, wherein supply amount of indium (In) material gas per unit time to the crystal growth surface on which said active layer grows is varied at a constant period selected from a range of 10 sec. to 6 min.

17. (Previously Presented) A method for manufacturing a light-emitting semiconductor device of claim 3, wherein supply amount of indium (In) material gas per unit time to the crystal growth surface on which said active layer grows is varied at a constant period selected from a range of 10 sec. to 6 min.

18. (Previously Presented) A method for manufacturing a light-emitting semiconductor device of claim 2, wherein said period is in an approximately constant selected from a range of 30 sec. to 2 min.

19. (Previously Presented) A method for manufacturing a light-emitting semiconductor device of claim 3, wherein said period is in an approximately constant selected from a range of 30 sec. to 2 min.

20. (Previously Presented) A light-emitting semiconductor device according to claim 2, wherein said active layer is doped with donor impurity so that electric concentration may be in a range of $1 \times 10^{16}/cm^3$ to $1 \times 10^{18}/cm^3$ at a room temperature.

21. (New) A light-emitting semiconductor device according to claim 1, wherein said wave form is substantially a sine wave.

22. (New) A light-emitting semiconductor device according to claim 2, wherein said wave form is substantially a sine wave.